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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,382	06/20/2007	Juha Telimaa	2747-8	6984
23117	7590	01/11/2008		
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
			EXAMINER SHABMAN, MARK A	
			ART UNIT 2856	PAPER NUMBER
			MAIL DATE 01/11/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/590,382

Applicant(s)

TELIMAA ET AL.

Examiner

Mark Shabman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/20/2007
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10-14, 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Kriz US PGPub 2002/0005075 (hereinafter referred to as Kriz).

Regarding **claim 10**, Kriz discloses a hand-held pipette comprising a calibration system. Figure 2 shows a block diagram of the system comprising a controller 46 ("control system"), a "user interface" 32, and an electronic display 35 in which volumes are shown. The system comprises a motor driven piston for controlling aspiration or dispensing of the pipette (paragraph [0019] and figures 1 and 2). The pipette further comprises a method of calibration of the system which is described in detail in paragraphs [0025]-[0032]. During calibration, a "real volume obtained with an indicated volume" is input to the system and is adjusted to the desired target. The volume is then measured by the system and a calibration factor is set based on the input values. The process of calibration is used for future readings, thus the calibration factor would be stored in the memory of the system as claimed. Paragraph [0033] describes the adjustment of the piston/motor assembly during the calibration process to correct for the error in the readings of the pipette, thus corresponding to the real dosing volume. Paragraph [0030] describes setting a calibration factor of, for example, 0.997 which

would correspond to a "resolution factor" of 0.03% however depending on how precise the measurements need to be, any number could be chosen including 0.05% or 0.01%.

Regarding **claim 11**, paragraph [0034] of Kriz discloses using calibration to control the stop position of the piston which reads on the "stroke length" as claimed in that the distance from the start position to the calculated stop position is the stroke length.

Regarding **claim 13**, figures 1 and 2 both show a motor in the system for controlling the piston (paragraphs [0019] and [0046]).

Regarding **claim 13**, paragraph [0024] of Kriz describes an Adjust function in which the volume desired for dosing is selected.

Regarding **claim 14**, paragraph [0034] describes the calibration technique as involving multiple aspirations of the pipette and calibrating based on the actual quantity of fluid, thus reading on the at least two indicated volumes.

Regarding **claim 17**, Kriz discloses a hand-held pipette comprising a calibration system. Figure 2 shows a block diagram of the system comprising a controller 46 ("control system"), a "user interface" 32, and an electronic display 35 in which volumes are shown. The system comprises a motor driven piston for controlling aspiration or dispensing of the pipette (paragraph [0019] and figures 1 and 2). The pipette further comprises a method of calibration of the system which is described in detail in paragraphs [0025]-[0032]. During calibration, a "real volume obtained with an indicated volume" is input to the system and is adjusted to the desired target. The volume is then measured by the system and a calibration factor is set based on the input values. The

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process of calibration is used for future readings, thus the calibration factor would be stored in the memory of the system as claimed. Paragraph [0033] describes the adjustment of the piston/motor assembly during the calibration process to correct for the error in the readings of the pipette, thus corresponding to the real dosing volume.

Paragraph [0030] describes setting a calibration factor of, for example, 0.997 which would correspond to a "resolution factor" of 0.03% however depending on how precise the measurements need to be, any number could be chosen including 0.05% or 0.01%.

Regarding **claim 18**, Kriz discloses a hand-held pipette and method for operation, including a calibration system. Figure 2 shows a block diagram of the system comprising a controller 46 ("control system"), a "user interface" 32, and an electronic display 35 in which volumes are shown. The system comprises a motor driven piston for controlling the volume of liquid aspirated or dispensed from the pipette (paragraph [0019] and figures 1 and 2). The pipette further comprises a method of calibration of the system which is described in detail in paragraphs [0025]-[0032]. During calibration, a "real volume obtained with an indicated volume" is input to the system and is adjusted to the desired target. The volume is then measured by the system and a calibration factor is set based on the input values. The process of calibration is used for future readings, thus the calibration factor would be stored in the memory of the system as claimed. Paragraph [0033] describes the adjustment of the piston/motor assembly during the calibration process to correct for the error in the readings of the pipette, thus corresponding to the real dosing volume. Paragraph [0030] describes setting a calibration factor of, for example, 0.997 which would correspond to a "resolution factor"

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of 0.03% however depending on how precise the measurements need to be, any number could be chosen including 0.05% or 0.01%.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kriz in view of the applicant admitted prior art.

Regarding **claim 15**, Kriz discloses the invention in its entirety but does not explicitly mention calibration calculation with the real volume linearly dependent on the set volume. The background of the present invention states that "calibration is generally performed assuming that the set volume and the dosing volume are linearly interdependent". It would have been obvious to one of ordinary skill in the art at the time of invention to use the same calibration method as disclosed since it was a well known method at the time of invention for yielding accurate results.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kriz.

Regarding **claim 16**, paragraph [0010] describes the use of a processor and memory for storing presets for piston stop positions and volume compensation algorithms. Paragraph [0035] further describes the preset volumes which can be

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loaded into the memory of the processor. Since the various volume measurement settings are stored in the memory to save time in changing settings, it would have been obvious to one of ordinary skill in the art at the time of invention to store calibration settings as well in a similar manner for the same reasons.

Conclusion

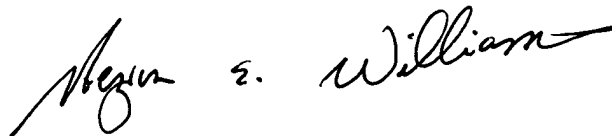
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Shabman whose telephone number is (571) 270-3263. The examiner can normally be reached on M-F 7:30am - 5:00pm, EST (Alternating Fridays Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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MAS

A handwritten signature in black ink, reading "Hezron E. Williams". The signature is written in a cursive style with a large, stylized "H" and a long, sweeping underline.

HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800